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compression algorithms can not be changed during the phone conversation. The use of only one type of compression technique prevents compensation for variable factors, such as varying packet sizes. Therefore, the need arises for the use of dynamically changing compression techniques, either manually or automatically for transmission of voice-over-IP allowing for adjustments to be made in accordance with varying network sage or bandwidth thereby making optimal use of network capacity and throughput.—

Please replace the paragraph starting on page 13, at line 3 and ending at page 13, line 7 with the following paragraph:

c3  
--It should be noted that a similar flow chart can be used to perform the opposite. Consider the case where a type of codec is being executed that compensates for either packet loss or pursuant to a user request, if, after sometime, the quality of information transfer over the network improves such that more bandwidth becomes available, another codec that results in larger packet sizes but a higher quality of transmission may be negotiated therefore and loaded.--

**In the Claims:**

Please amend the following claims:

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1. (Twice Amended) A router device for use in a communication system having at least two telephone devices in communications with each other for transferring voice information therebetween through a packet switching network, the router device being coupled between one of the telephone devices and the packet switching network and for performing one of a plurality of types of compression/decompression (codec) operation on information being transferred between the telephone devices comprising:

c4  
7 a Digital Signal Processor (DSP) module responsive to an analog telephone signal  
8 from one of the telephone devices and operative to convert the analog telephone signal to  
9 a digital telephone signal and further operative to packetize the digital telephone signal for  
10 transmission to a remotely-located router device, the router device and the remotely-  
11 located device initially negotiating to utilize a first type of codec, the DSP module for  
12 renegotiating the use of a second type of codec and switching from using said first type of

13 codec to using said second type of codec upon detection of degradation in the quality of  
14 the voice information,

15 wherein the type of codec being utilized is repeatedly renegotiated to dynamically  
16 change compression techniques to adjust for network usage thereby optimizing the use of  
17 network capacity and throughput and further wherein switching between the codecs is  
18 performed while a conversation is taking place between the two telephone devices yet  
19 avoiding substantial disturbance to users of the telephone devices.

1 14. (Once Amended) A router device for use in a communication system having a first  
2 telephone device for causing the transmission of voice conversations and a first fax  
3 machine coupled to the router device, the router device responsive to telephone signals,  
4 carrying voice conversations, generated by the first telephone device and fax signals  
5 generated by the first fax machine and operative to transfer digital information, through a  
6 packet switching network, to a remotely-located router coupled to a second telephone  
7 device for receiving the voice conversations and a second fax machine comprising:

8 a DSP module for carrying a user-initiated telephone conversation on a  
9 telephone line connecting the first telephone device and the second telephone device  
10 through the packet switching network, the DSP module further responsive to analog fax  
11 signals from the first fax machine and further operative to convert the analog fax signals to  
12 digital fax signals and to packetized the digital fax signals for transmission, through the  
13 packet switching network, to the second fax machine,

14 wherein the fax transmission from the first fax machine to the second fax machine  
15 takes place on the telephone line causing a temporary interruption to the telephone  
16 conversation thereby avoiding the need for telephone connection to be disconnected prior  
17 to the fax transmission.

1 17. (Twice Amended) A method for use in a communication system having at least two  
2 telephone devices in communications with each other for transferring voice information  
3 therebetween through a packet switching network, the router device being coupled between  
4 one of the telephone devices and the packet switching network and for performing one of a  
5 plurality of types of compression/decompression (codec) operation on information being  
6 transferred between the telephone devices comprising:

7 receiving an analog telephone signal through a telephone connection from one of the  
8 telephone devices;  
9 converting the analog telephone signal to a digital telephone signal;  
10 separating information carried on the digital telephone signal into packets of  
11 information;  
12 initially negotiating a first type of codec for communication between the telephone  
13 devices;  
14 using a first type of codec for transferring the packets of information between the two  
15 telephone devices through the packet switching network;  
16 renegotiating the use of a second type of codec; and  
17 switching to using said second type of codec upon detection of degradation in the  
18 quality of the voice information during the course of the telephone connection.

1  
2  
1 Please add the following claims:

1 18. A router device as recited in claim 1 wherein the codec negotiation is performed  
2 pursuant to the H.245 protocol.

1 19. A router device as recited in claim 1 wherein the first type of codec utilizes a  
2 compression/decompression algorithm defined by any one of the standards: G.711, G726,  
3 G729 or G723.1 and the second type of codec utilizes a compression/decompression  
4 algorithm defined by any one of the standards: G.711, G726, G729 or G723.1.

1 20. A router device as recited in claim 14 wherein the connections are established pursuant  
2 to the H.225 protocol.